

Figure 1

Operation	Stage 1	Stage 2	Stage 3
0	0, (16), 32, (48),	0, (4), 8, (12),	0, (1), 2, (3),
1	(1), 17, (33), 49,	(1), 5, (9), 13,	(4), 5, (6), 7,
2	2, (18), 34, (50),	2, (6), 10, (14),	8, (9), 10, (11),
3	(3), 19, (35), 51,	(3), 7, (11), 15,	(12), 13, (14), 15,
4	(4), 20, (36), 52,	(16), 20, (24), 28,	(16), 17, (18), 19,
5	5, (21), 37, (53),	17, (21), 25, (29),	20, (21), 22, (23),
6	(6), 22, (38), 54,	(18), 22, (26), 30,	(24), 25, (26), 27,
7	7, (23), 39, (55),	19, (23), 27, (31),	28, (29), 30, (31),
8	8, (24), 40, (56),	32, (36), 40, (44),	32, (33), 34, (35),
9	(9), 25, (41), 57,	(33), 37, (41), 45,	(36), 37, (38), 39,
10	10, (26), 42, (58),	34, (38), 42, (46),	40, (41), 42, (43),
11	(11), 27, (43), 59,	(35), 39, (43), 47,	(44), 45, (46), 47,
12	(12), 28, (44), 60,	(48), 52, (56), 60,	(48), 49, (50), 51,
13	13, (29), 45, (61),	49, (53), 57, (61),	52, (53), 54, (55),
14	(14), 30, (46), 62,	(50), 54, (58), 62,	(56), 57, (58), 59,
15	15, (31), 47, (63),	51, (55), 59, (63),	60, (61), 62, (63),

Diagram annotations:

- Arrow 36: From (16) in Stage 1, Operation 4 to (12) in Stage 2, Operation 0.
- Arrow 34: From (31) in Stage 1, Operation 15 to (55) in Stage 2, Operation 15.
- Arrow 32: From (32) in Stage 1, Operation 2 to (32) in Stage 3, Operation 8.
- Arrow 30a: From (30) in Stage 1, Operation 13 to (30) in Stage 3, Operation 6.
- Arrow 30b: From (30) in Stage 1, Operation 13 to (30) in Stage 3, Operation 6.
- Arrow 30c: From (30) in Stage 1, Operation 13 to (30) in Stage 3, Operation 6.

Figure 2

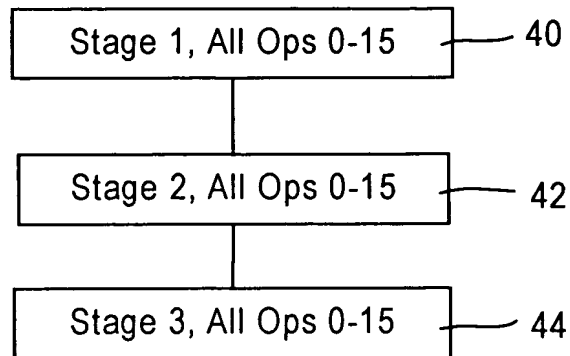


Figure 3A

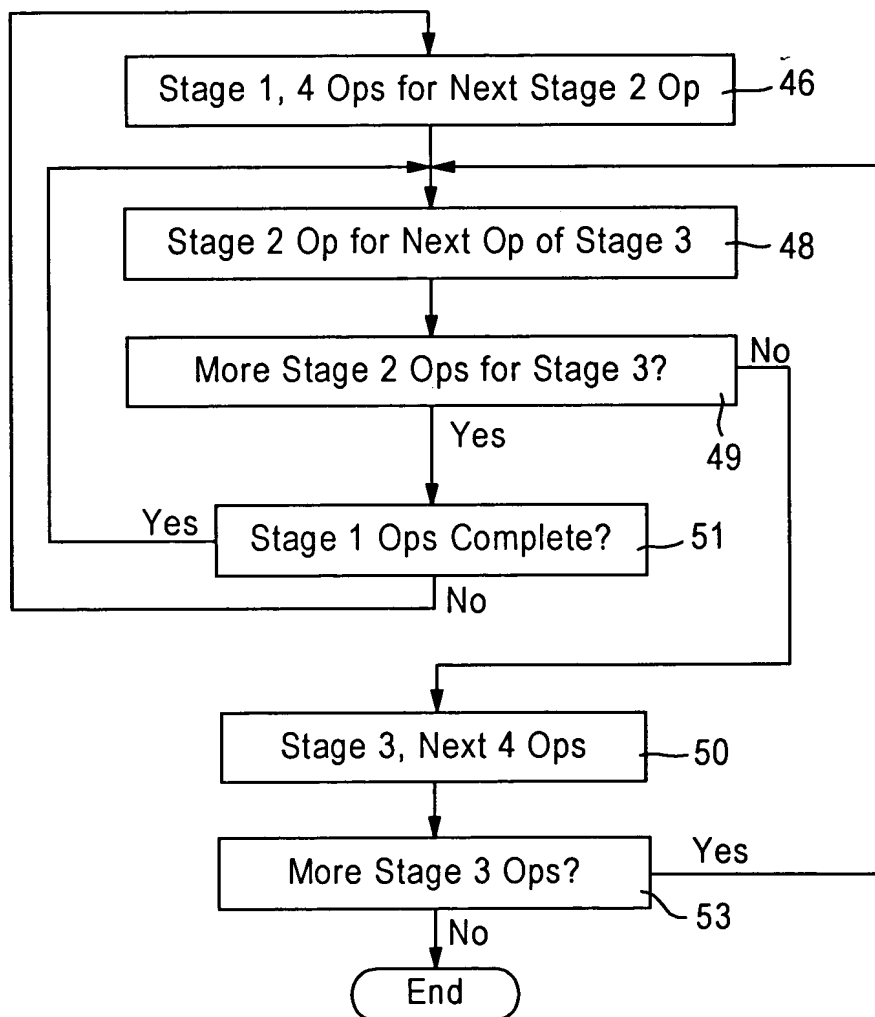


Figure 3B

66 68

Bank 1 Read	0	32	17	49	2	34	19	51	20	52	5	...	47	0	8	5	13	2	10	7	...	0	2	5	7	8	10	13
Bank 2 Read	16	48	1	33	18	50	3	35	4	36	21	...	63	4	12	1	9	6	14	3	...	1	3	4	6	9	11	12
Bank 1 Write			0	32	17	49	2	34	19	51	20	...	62	15	47	0	8	5	13	2	...	51	59	0	2	5	7	8
Bank 2 Write			16	48	1	33	18	50	3	35	4	...	46	31	63	4	12	1	9	6	...	55	63	1	3	4	6	9
Stage 1 Op	(0)	(0)	0	(1)	1	(2)	2	(3)	3	(4)	4	...	(15)	15	D	D	D	D	D	D		D	D	D	D	D	D	D
Stage 2 Op														(0)	(0)	0	(1)	1	(2)	2	...	15	D	D	D	D	D	D
Stage 3 Op																						(0)	(0)	0	(1)	1	(2)	2
Clock Cycle	1	2	3	4	5	6	7	8	9	10	11	...	32	33	34	35	36	37	38	39	...	65	66	67	68	69	70	71

↑ ↑ ↑ 60 62 64

Figure 4A

Bank 1 Read	0	32	20	52	8	40	28	60	0	8	17	49	5	27	25	57	13	45	5	9	2	...	0	2	5	7	8	11
Bank 2 Read	16	48	4	36	24	56	12	44	4	12	1	33	21	53	9	41	29	61	1	13	18	...	1	3	4	6	9	10
Bank 1 Write			0	32	20	52	8	40	28	60	0	8	17	49	5	27	25	57	13	45	5	...	7	15	0	2	5	7
Bank 2 Write			16	48	4	36	24	56	12	44	4	12	1	33	21	53	9	41	29	61	1	...	3	11	1	3	4	6
Stage 1 Op	(0)	(0)	0	(4)	4	(8)	8	(12)	12		(1)	(1)	1	(5)	5	(9)	9	(13)	13	(2)	(2)	...						
Stage 2 Op									(0)	(0)	0								(1)	(1)	1	...	3					
Stage 3 Op																						...	(0)	(0)	0	(1)	1	(2)
Clock Cycle	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	...	41	42	43	44	45	46

Figure 4B

Figure 4B

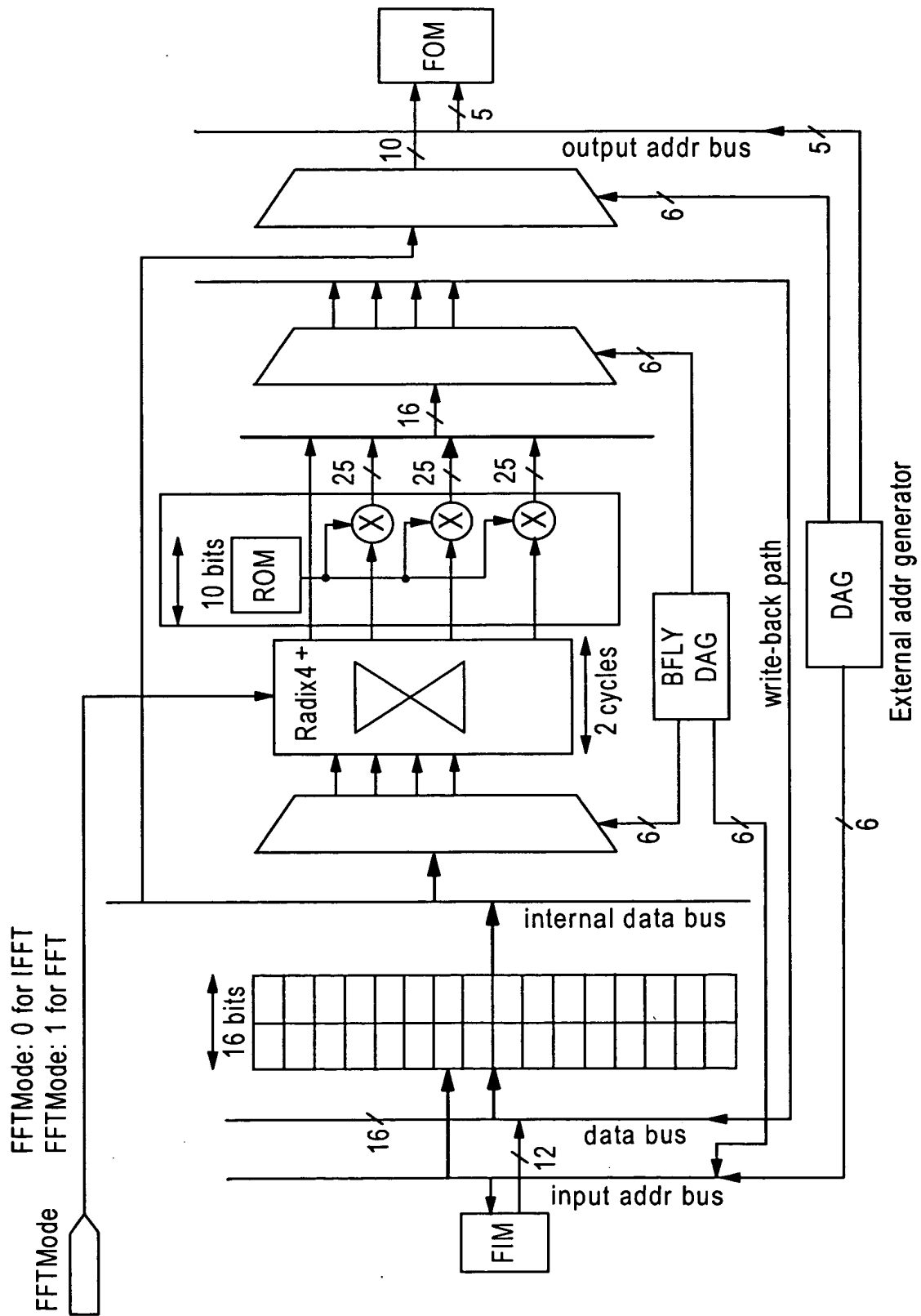


Figure 5